

The Gough's Cave human fossils: an introduction

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SYNOPSIS. Locality details, lists of collections and details of age dating are given for specimens recovered from Gough's Cave, Cheddar, Somerset, as an introduction to 16 papers describing this hominid and other mammal material, that are due to be published in this and succeeding issues of the *Bulletin*.

Gough's (New) Cave in Cheddar Gorge, Somerset (Fig. 1), has been known as an archaeological and palaeontological site for over a century (Jacobi 1985; 1991; this series). It has produced a wealth of late Pleistocene (Oxygen Isotope Stage 2) fauna and Upper Palaeolithic (sometimes termed 'Creswellian') artefacts, mainly through incidental discoveries made during its continuing development as a show cave (Fig. 2). Through large numbers of direct radiocarbon dates on faunal material (see e.g. Housley 1991) it is known that most of these finds derive from the 'Lateglacial Interstadial', approximately 11,500–13,000 radiocarbon years ago (= approximately 13,000–14,500 calendar years: see Fig. 3), and although the Pleistocene human material will be treated as a single assemblage here, it is possible that the Lateglacial human occupation covered a wider range than this would imply (Hedges *et al.* 1991). The Lateglacial fauna consists of species such as *Equus ferus*, *Cervus elaphus*, *Bos primigenius*, *Saiga tatarica*, *Lepus timidus*, and (from worked, possibly imported, examples) *Mammuthus primigenius* (Currant 1986, 1991; this series; Lister 1991), and much of this faunal material shows evidence of human butchery or modification (Currant 1991; this series; Andrews & Fernández-Jalvo this series). The site has also produced terminal Pleistocene and early and late Holocene material.

Gough's Cave has also produced a large, but disparate, sample of fossil human material, beginning with the discovery of the first elements of the 'Cheddar Man' skeleton in 1903. This skeleton, here termed Gough's Cave 1 (as in Oakley *et al.* 1971), has been directly dated as early Holocene (inferred Mesolithic) in age, and it remains the most complete ancient human skeleton known from the British Isles. Over the succeeding 90 years, numerous additional finds of human skeletal material have been made at the site, culminating in the extensive Lateglacial material excavated between 1986–1992 (the localities are shown in Figs 2, 4). This latter material was almost all excavated from about a cubic metre of fine gravel and silty sediments wedged between a large rock and an overhang from the north wall in area I (Figs 2, 4; Currant *et al.* 1989; Macphail & Goldberg, this series), lying immediately above the previously recorded conglomerate extending into the 'Cheddar Man fissure'. Short reviews of these finds have been published (Stringer 1985; Currant *et al.* 1989; Stringer 1990; Cook 1991) and they are summarised in Table 1. It is evident from the present studies that the following minimum numbers of individuals are represented by human skeletal or dental material:

Late Holocene. Three individuals: one child (3–8 years); one adolescent (12–14 years); one older adult.

Early Holocene/Mesolithic. One individual ('Cheddar Man'): young adult.

Late Pleistocene/Creswellian. Five individuals: one child (approximately 3 years at death); two adolescents/young adults; one young/mid-adult; one older adult.

In this and succeeding issues of the *Bulletin*, the Gough's Cave Late Pleistocene (Creswellian) and early Holocene (Gough's Cave 1 – 'Cheddar Man') human material will be described and analysed in papers by different workers, and the Creswellian assemblages will be subjected to taphonomic analyses. There will also be papers on the associated sedimentology, archaeology and mammalian faunas of Gough's Cave. The planned publications are listed below. Three of them (papers 2–4) describe both Pleistocene (Creswellian) and Holocene material (including Gough's Cave 1), while the others specifically describe either Late Pleistocene (Creswellian) material or Gough's Cave 1.

1. Taphonomy of the Creswellian (Pleistocene) faunal and human remains from Gough's Cave (Somerset, England): a case of cannibalism? P. Andrews & Y. Fernández-Jalvo.
2. The human cranial remains from Gough's Cave (Somerset, England). L. Humphrey & C. Stringer.
3. The human mandibles from Gough's Cave (Somerset, England). A. Rosas & C. Stringer.
4. The human dental remains from Gough's Cave (Somerset, England). D. Hawkey.
5. The Creswellian (Pleistocene) human upper limb remains from Gough's Cave (Somerset, England). S. Churchill.
6. The Creswellian (Pleistocene) human axial skeletal remains from Gough's Cave (Somerset, England). S. Churchill.
7. The Creswellian (Pleistocene) human lower limb remains from Gough's Cave (Somerset, England). E. Trinkaus.
8. Gough's Cave 1 (Somerset, England): a study of the pectoral girdle and upper limbs. S. Churchill.
9. Gough's Cave 1 (Somerset, England): a study of the hand bones. E. Trinkaus.
10. Gough's Cave 1 (Somerset, England): a study of the axial skeleton. S. Churchill & T. Holliday.
11. Gough's Cave 1 (Somerset, England): a study of the pelvis & lower limbs. E. Trinkaus.
12. Gough's Cave 1 (Somerset, England): an assessment of sex and age at death. E. Trinkaus, L. Humphrey, C. Stringer, S. Churchill & R. Tague.
13. Gough's Cave 1 (Somerset, England): an assessment of body size and shape. T. Holliday & S. Churchill.
14. Gough's Cave, Cheddar, Somerset: microstratigraphy of the Late Pleistocene/earliest Holocene sediments. R. Macphail & P. Goldberg.

Table 1 The main human skeletal material from Gough's cave, Cheddar. Data from Stringer (1985, 1990), and further radiocarbon dates from Hedges *et al.* (1991). As discussed in Hedges *et al.* (1991), the discrepancy in the radiocarbon dates for Gough's Cave 2 may be due to contamination from post-excavation treatment of the 1927-28 finds.

SPECIMEN	DATE FOUND	ACTUAL OR INFERRED LOCATION OR STRAT POSITION	AGE	DETAILS	ORIGINAL DESCRIPTION
GC1 'Cheddar Man'	1903/1935	'Cheddar Man fissure' spit 9?	Early Holocene/Mesolithic. 9080 ± 150 BP (tibia: BM-525); 9100 ± 100 BP (talus: OxA-814)	Partial skeleton adult male	Seligman & Parsons 1914
GC2	1927-28	Spit 12-13	Late Pleistocene/Creswellian. 11480 ± 90 BP (OxA-2234); 11820 ± 120 BP (1987 frontal conjoin: OxA-2795)	?Adult calotte	Keith & Cooper 1929 (called 'skull 1', suggested adult male)
GC3	1927-29	Spits 10-11, 14	Late Pleistocene/Creswellian. 11990 ± 90 BP (OxA-2235)	Child calvaria	Keith & Cooper 1929 (called 'skull 2', suggested 3-year old female)
GC4	1927-28	Spit 7	Late Holocene	Adol. Cranial and maxilla	Keith & Cooper 1929
GC5	1927-28	Spit 7	Late Holocene	Adult maxilla	Keith & Cooper 1929
GC6	1928-29	Spit 14	Late Pleistocene/Creswellian. 11700 ± 100 BP (OxA-2236)	Adult mandible	Cooper, in Parry 1931
GC7	1950	Spit 14	Late Pleistocene/Creswellian	Suggested right parietal fragment, but may be left	Tratman 1975
No number	1927-28	Spits 6-7	? Late Holocene	Postcranial frags, now lost	
No number	1928-29	Spit 16	Late Pleistocene/Creswellian	Humerus, now lost	
No number	1949-51	Spits 12, 14	Late Pleistocene/Creswellian	Postcranial fragments	Papers in this series
1.1/38	1959	Spit 15 +	Late Pleistocene/Creswellian	Left scapula	Stringer 1985
M.23.1/1	1959	Spit 15 +	Late Pleistocene/Creswellian	Left clavicle	Stringer 1985
M.23.1/2	1959	Spit 15 +	Late Pleistocene/Creswellian. 12300 ± 100 BP (OxA-2796)	Right scapula	Stringer 1985
Marked '7'	Unknown	Unknown	?Late Pleistocene/Creswellian	Left scapula	Stringer 1985
Finds no. 22 and 87	1986-7	Area I (See figure 2)	Late Pleistocene/Creswellian	Adolescent maxillae	Papers in this series
Find no. 49	1986-7	Area I	Late Pleistocene/Creswellian	Adolescent mandible, same individual as maxillae	Papers in this series
Find no. 139	1987	Area I	Late Pleistocene/Creswellian	Adult maxillae	Papers in this series
Find no. 190	1987	Area I	Late Pleistocene/Creswellian. 12380 ± 110 BP (OxA-2796)	?Adult calotte	Papers in this series
Find no. 253	1987	Area I	Late Pleistocene/Creswellian	Adult right hemimandible	Papers in this series
Additional finds	1986-1992	Area I	Late Pleistocene/Creswellian	Numerous dental, cranial and postcranial frags	Papers in this series

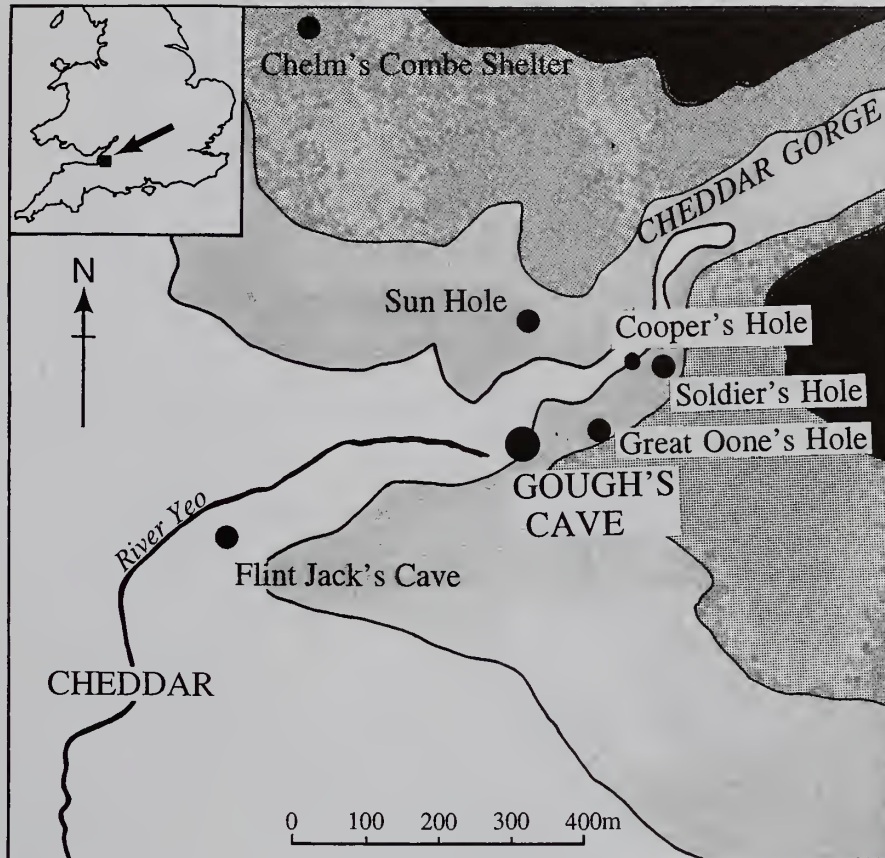


Fig. 1 Map showing location of Gough's Cave, Somerset, England.

- 15. Observations on the Pleistocene archaeology of Gough's Cave, Somerset, England. R. Jacobi.
- 16. A review of the Lateglacial mammal fauna of Gough's Cave, Somerset, England. A. Currant.

Through these studies, it is hoped that this important material, which spans the Pleistocene-Holocene and Palaeolithic-Mesolithic transitions, will begin to receive the scientific attention it deserves, and can then be compared and integrated with the record from

mainland Europe. All of the described human material, and parts of the archaeological and faunal material, are now curated at The Natural History Museum, London.

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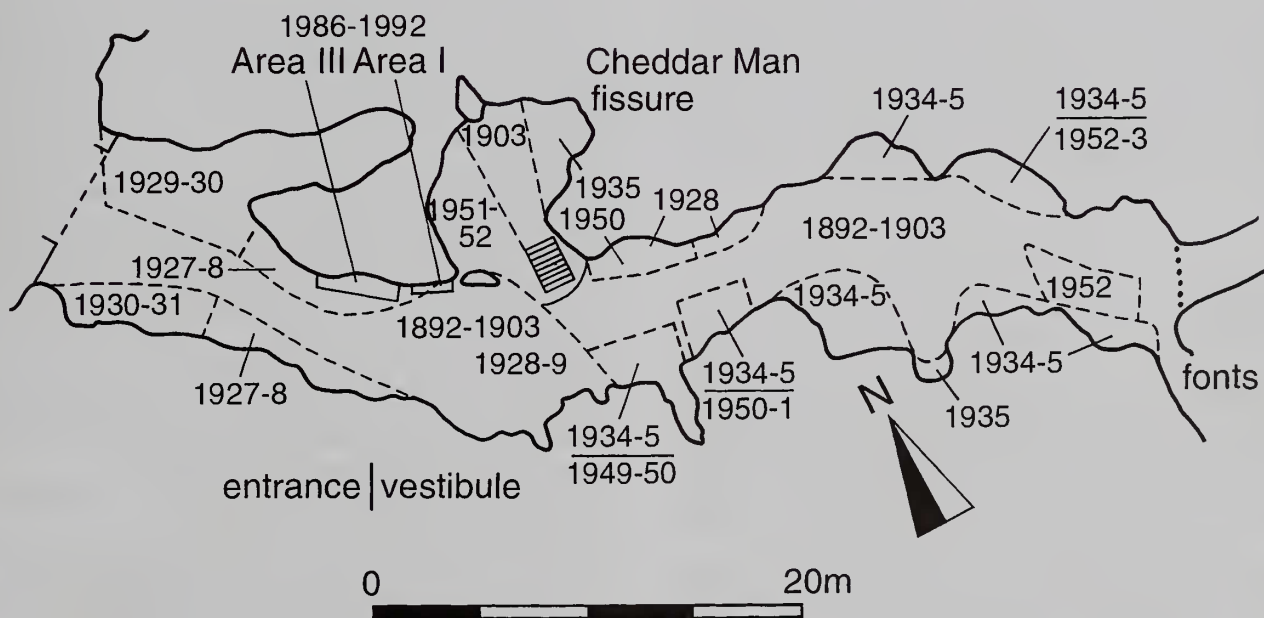


Fig. 2 Plan of the outer part of Gough's Cave (after Donovan 1955; Jacobi 1985; Currant *et al.* 1989), showing the areas and dates of archaeological, faunal and human skeletal discoveries. A line indicates the present separation of the entrance and vestibule by a grille gate. 'The Fonts' are formations of stalagmitic flowstone, beyond which little archaeological or faunal material has been recovered.

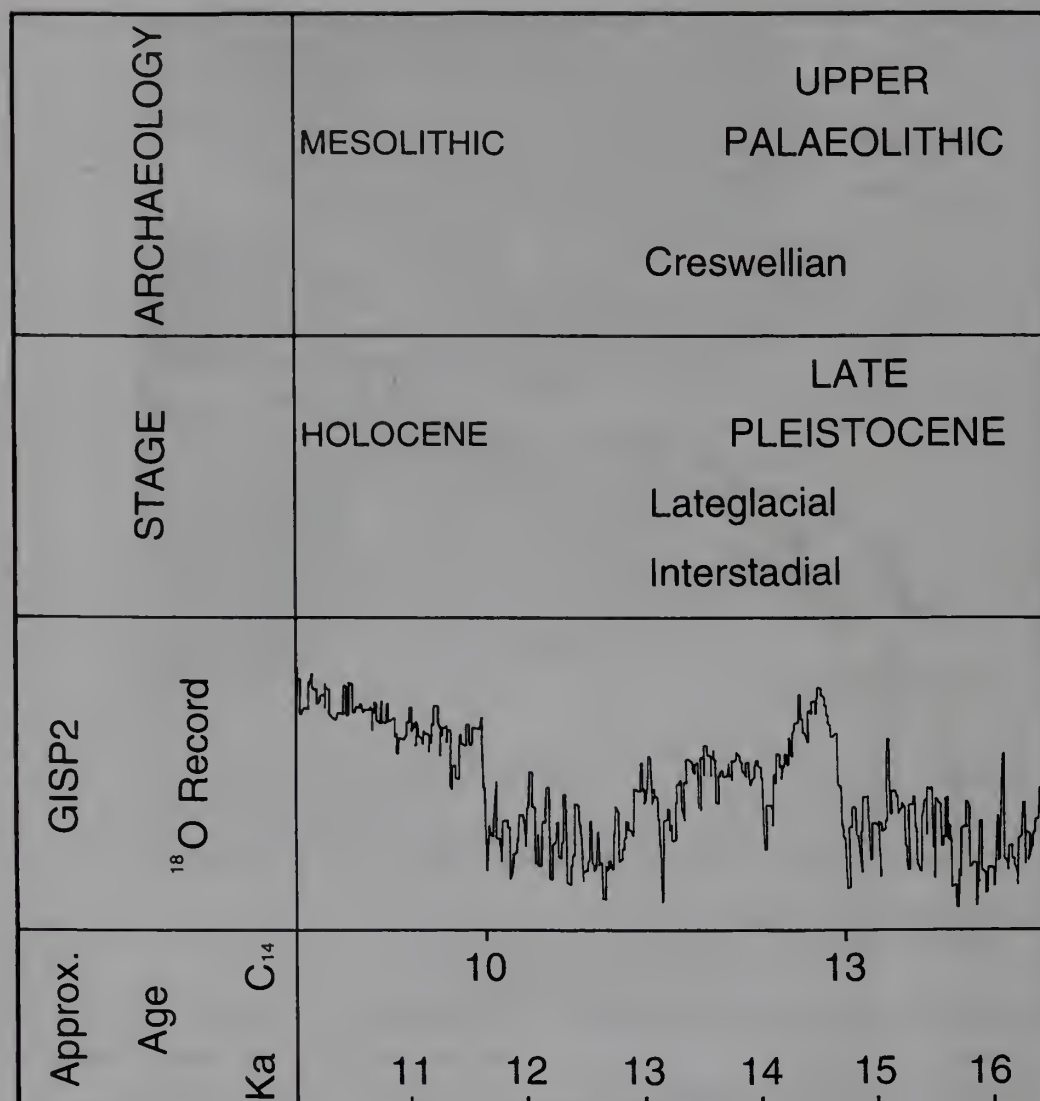


Fig. 3 Time scale, climatic record, stratigraphic, and archaeological divisions for the Late Pleistocene – early Holocene.

important roles in the excavation and post-excavation work. Throughout the excavations we were made most welcome by the staff of the Cheddar Caves, particularly Sandra Lee and Chris Bradshaw, and subsequently, Hugh Cornwell and Bob Smart. We are also grateful to Lord Weymouth for his permission to carry out the excavations, and for his subsequent approval of the transfer of the Gough's fossil human material to The Natural History Museum. Preparation, conservation and replication of the Gough's Cave material were carried out by members of the Palaeontology Conservation Unit and much of the photography by the Photographic Unit of The Natural History Museum. Figures 1–3 were produced by Phil Rye.

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Fig. 4 Area I excavation at Gough's Cave (1986–1992). Area I is lower left in this photograph, the 'Cheddar Man fissure' centre right.